If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.

Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ

Training Office, Bldg. 911A.

C-A OPERATIONS PROCEDURES MANUAL

8.16.6 LINAC Chilled Water System

Text pages 2 through 3

Hand Processed Changes

HPC No.	<u>Date</u>	Page Nos.	<u>Initials</u>
		_	
	Approved:	Signature on File	
	Co	Collider-Accelerator Department Chairman	

R. Grandinetti

8.16.6 LINAC Chilled Water System

1. Purpose

To provide operating instructions to the Water Systems Technicians for operation of the LINAC Chilled Water System.

2. Responsibilities

Water Systems Technicians start and stop this system.

3. <u>Prerequisites</u>

- 3.1 Startup Request Permission from Linac Control.
- 3.2 Verify that cooling tower system is operating.
- 3.3 Shutdown Request permission from LINAC Control.
- 3.4 Qualified and trained Water Systems Technician.

4. <u>Precautions</u>

- 4.1 Pumps Do not operate pumps without water or with valves closed.
- 4.2 Chiller Do not operate without tower and chilled water circulation.

5. Procedures

- Verify that water level is within operating limits as marked on the chilled water expansion tank sight glass.
- 5.2 Open suction and discharge valves on select pump.
- 5.3 Roll pump shaft by hand.
- 5.4 Turn on chilled water pump circuit breaker.
- 5.5 Start pump at local start/stop station.
- 5.6 Check system pressure (60 80 psi) and temperature 45-50°F with chiller on) for proper settings and operation.
- 5.7 Observe pump operation and restore alarms.

- 5.8 Verify that the oil level (1/2 full) and temperature (130°F) of the selected chiller compressor is within normal limits as indicated on the compressor sight glass and temperature indicator.
- 5.9 Turn on chiller disconnect switch.
- 5.10 Place the chiller auto purge system in automatic with local purge switch.
- 5.11 Start chiller with local start switch on microprocessor. Chiller should start in approximately 4 minutes.
- 5.12 Observe chiller operation and log all pressure and temperature.
- 5.13 For shutdown, turn off chiller at microprocessor and wait for delayed shutdown. Turn off chilled water pump, close suction and discharge valves, and secure alarms.

6. **Documentation**

None

7. References

7.1 LINAC flow diagram, C.T. Main Drawing #2484-402-M2. Carrier startup, operations, and maintenance instruction manual.

8. Attachments

None